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ABSTRACT

A method and device for estimating the bottleneck bandwidth over a communication network is provided. The method includes the steps of: transmission by the sever through a bottleneck link a plurality of bursts comprised of packets to the client; calculating a set of bandwidth samples for each burst received by the client end; determining a new bottleneck bandwidth from the calculated bandwidth samples for the following transmission of data packets between the server and the client. The device capable of estimating a bottleneck bandwidth includes: a means for transmitting a plurality of bursts comprised of packets; a means for receiving each burst packets via a bottleneck link; a means for generating a set of bandwidth samples based on a difference between an inter-packet spacing between the first and the last packet within each burst; and, a means for determining the current bottleneck bandwidth from the generated bandwidth samples.